

NEW ABSTRACT

An optical coherence tomography system includes an optical source has an emission wavelength in the range of $1.6\mu\text{m}$ to $2.0\mu\text{m}$, in particular having an infrared emission predominantly at a wavelength of $1.8\mu\text{m}$ associated with a transition between an upper energy level and a lower energy level and the optical source comprises an excitation system which generates stimulated emission from a pump level to the upper energy level. The optical source may include a Tm-doped fiber in an optical cavity.